



Extension FactSheet

Food, Agricultural and Biological Engineering, 590 Woody Hayes Drive, Columbus, Ohio 43210

The EPA Air Quality Compliance Agreement with Animal Feeding Operations (AFOs)

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The U.S. Environmental Protection Agency (EPA) announced an Air Quality Compliance Agreement with Animal Feeding Operations **(the Agreement)** on January 21, 2005. This is a **voluntary** agreement between the EPA and individual AFOs. It was published in the Federal Register on January 31. The EPA will publish a notice in the Federal Register announcing a reopening of the comment period from April 1 to May 2, 2005. The deadline for AFOs to sign the agreement was May 1, 2005, but will be extended until July 1, 2005.

Background

Under the current Clean Air Act (CAA), any stationary pollutant source should not emit air pollutants more than the regulatory thresholds established by the CAA Title V and Title I, such as emission of 100 tons per year of any air pollutant. Under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Environmental Planning and Community Right-to-Know Act (EPCRA), AFOs are required to report any emissions of Ammonia (NH_3) or Hydrogen Sulfide (H_2S) exceeding 100 pounds in any 24-hour period.

Increased public concerns over air quality impacts from AFOs in several states is leading the EPA to establish air emission monitoring procedures for farms that had been

traditionally exempt from the CAA regulations and state air quality regulations.

The EPA expects AFOs to comply with the air quality laws, but has found it was difficult to determine if an AFO is in violation and the extent of the violation. A two-year national air monitoring study **(the Study)** is expected to be the quickest and most effective means to establish regulatory thresholds for air emissions from an AFO's animal housing facilities (barns, covered feedlots, etc.) and manure storage structures (lagoons, covered manure pits, etc.). This study is to establish the threshold emissions for ammonia (NH_3), hydrogen sulfide (H_2S), total suspended particulates (TSP), particulate matter (PM_{10} , $\text{PM}_{2.5}$), and volatile organic compounds (VOC).

Purpose of the Agreement

The Agreement's purpose is to ensure an AFO's compliance with the applicable CAA, CERCLA, and EPCRA provisions by establishing Emissions Estimating Methodologies (EEM) and air emission thresholds for AFOs.

Key Obligations of Participating AFOs

Producers who sign the Air Compliance Agreement with the EPA agree to:

- Pay a civil penalty, ranging from \$200 to \$100,000, depending on the size and number of AFOs (Table 1),
- Pay up to \$2,500 into a fund for a nationwide emissions monitoring program, and
- Make their facilities available for monitoring.

After the EPA establishes EEM and air emission thresholds for AFOs, all AFOs should:

- Apply for applicable permits and comply with permit conditions,
- Install Best Available Control Technology or technology to achieve the Lowest Rate Emission Rate on all sources exceeding the air emission thresholds, and
- Report any qualifying releases of NH_3 and H_2S , according to CERCLA and EPCRA.

Table 1. The civil penalty for an AFO on a single farm.

Penalty	\$200	\$500	\$1,000
Farms	Farm size (number of animals)		
<i>Swine</i>			
> 55 lb	< 2,500	2,500–25,000	> 25,000
< 55 lb	< 10,000	10,000–100,000	>100,000
<i>Poultry</i>			
Layers	< 82,000	82,000–820,000	> 820,000
Broilers	< 125,000	125,000–1,250,000	> 1,250,000
Turkeys	< 55,000	55,000–550,000	> 550,000
<i>Dairy</i>			
Cows	< 700	700–7,000	> 7,000
Heifers	<1,000	1,000–10,000	> 10,000

For producers with multiple farms, the civil penalty will range from \$1,000 to \$100,000. Refer to the Agreement for details.

Legal Benefits of Participating AFOs

By signing the Agreement, an AFO will receive a limited release and legal protection from liability for past and on-going CAA, CERCLA, and EPCRA violations.

The legal protection will extend until (at least 3 to 4 years from now):

- the national air monitoring study is completed;

- EPA establishes EEM;
- The AFO reports its release of ammonia and/or hydrogen sulfide, applies, and receives the requisite CAA permits.

Any AFO that chooses not to sign the Agreement will be subject to potential enforcement actions for any past and on-going CAA, CERCLA, and EPCRA violations.

Conditions and Limits of the Covenant Not to Sue

- The EPA will continue to prosecute cases that may present an imminent and substantial endangerment to human health.
- The covenant not to sue covers only violations related to emissions from agricultural livestock and agricultural livestock waste.
- The covenant not to sue does not affect permits required for new construction or modification of existing AFOs.
- The covenant not to sue will be nullified if an AFO fails to comply with state nuisance laws relating to air emissions.
- The covenant does not cover emissions from generators or other internal combustion engines, waste-to-energy systems, and land application of animal waste.
- The covenant not to sue also does not cover emissions from sources not participating in the Agreement.
- An AFO that is subject to Federal or state CAA, CERCLA section 103, or EPCRA section 304 enforcement actions may not be eligible to enter into the Agreement.

Should an AFO Sign the Agreement?

Logically, only an AFO that will likely emit more than the threshold amount of air pollutants needs to seek legal protection by signing the Agreement. Because air emissions from AFOs are affected by animal species, diet, facility type, manure management, weather conditions, geographic locations, and mitigation practices, AFOs that will likely exceed the emission thresholds of the Federal laws vary as well. Limited air quality and emission data make it difficult to estimate how much an individual AFO will emit. That is why EPA is offering the Agreement and initiating the national air monitoring study.

Based on limited air emission studies at Ohio State University and other land-grant universities, large layer

facilities with more than **7.8 million** layers will likely emit more than 250 tons total suspended particulate per year, which is a particulate emission threshold of the CAA.

AFOs that are estimated to emit more than 100 lbs ammonia per 24-hour period (the NH_3 emission threshold of CERCLA and EPCRA) are summarized in Table 2.

Table 2. AFOs that may emit more than 100 lbs/day of NH_3 .

Facility features	Farm size (number of animals)
<i>Swine</i>	
Finishing facility	1,650
Nursery	5,500
Farrowing and gestation facility	1,800
<i>Poultry</i>	
Layers with deep manure pit	35,000
Layers with belt battery	114,000
Broilers	15,000
<i>Dairy</i>	
Mature cows	250–390

How to Sign the Agreement

Each AFO, especially the ones that are larger than the threshold farm size, should review the Agreement with the help of a legal representative. To sign up:

- Download and sign the Agreement (<http://www.epa.gov/compliance/resources/agreements/caa/cafo-agr-050121.pdf>)
- Fill out Attachment A to the Agreement, and
- Mail the signed agreement and attachments to:

Special Litigation and Projects Division (2248A)
Attn: Air Compliance Agreements
Office of Regulatory Enforcement
Office of Enforcement and Compliance Assurance
U.S. EPA
1200 Pennsylvania Ave., N.W.
Washington, DC 20460

Where can I learn more details?

Access this website for detailed information: <http://www.epa.gov/compliance/resources/agreements/caa/cafo-agr-0501.html>

Visit Ohio State University Extension's web site "Ohioline" at:
<http://ohioline.osu.edu>

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